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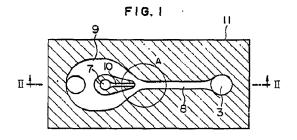
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Flow-cell device.

57 A sheath flow type flow-cell device for Flow-Cytometer comprises a first inlet (6) for sheath fluid, a flow passage (9) communicated with the first inlet and contracted toward downstream, the flow passage having a substantially rectangular cross section, a straight capillary flow passage (8) connected to the flow passage at downstream thereof, the capillary flow passage having a substantially rectangular cross section, a second inlet (7) for sample fluid, a nozzle (10) communicated with the second inlet and opened within the flow pasage in the same direction as the flow direction of the straight capillary flow passage, a discharge port (3) provided at a terminal end of the straight capillary flow passage, and flow regulating means (8a, 8b; 19; 20) for regulating the flow of the sheath fluid in the straight capillary flow passage to be a laminar flow having a gradient of flow velocity.



EUROPEAN SEARCH REPORT

EP 88 10 6306

	DOCUMENTS CONS	DERED TO BE RELEVA	MN I	
Category	Citation of document with i of relevant pa	ndication, where appropriate, ssages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
Y,D	KACHEL et al.: "Uni	7, pages 774-780; V. form Lateral by flow forces, of low through	1	G 01 N 21/05 G 01 N 15/14
Y	US-A-3 893 766 (W. * column 2, lines 5		1	
A	US-A-4 352 558 (W. * claim 1; figure 1	EISERT) *	1,8	
A	REVIEW OF SCIENTIFI vol. 55, no. 9, Sep 1375-1400, New York STEINKAMP: "Flow cy page 1380, paragrap	tember 1984, pages , US; J.A. tometry" * figure 5;		TECHNICAL FIELDS SEARCHED (Int. Cl.4)
	The present search report has b	een drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
BE	RLIN	23-02-1990	BRIS	SON O.P.
X : part Y : part doc: A : tech O : non	CATEGORY OF CITED DOCUME icularly relevant if taken alone icularly relevant if combined with an ument of the same category inological background —-written disclosure rmediate document	E : earlier paten after the fili other D : document ci L : document ci	ted in the application ed for other reasons	ished on, or

EPO FORM 1503 03.82 (P0401)